

ABSTRACT

The invention relates to a highly repetitive laser system operating according to the reproducible amplifier principle. Said system comprises at least one amplified laser medium, a laser resonator provided with at least one resonator mirror and at least one modulator and a pump source, in particular, a laser diode source, which is used to pump the laser medium. The highly repetitive laser system is compact by virtue of the fact that a pulse extensor, having a highly dispersive effect as a result of the structure or material thereof, is integrated into the laser resonator.